

## CLAIMS:

1. A binder resin (A) for a toner which comprises a styrene-acrylic resin having a structure derived from a carboxyl group and a structure derived from a glycidyl group, wherein the content ( $A_{IS}$ ) of a gel component is  $1 \text{ mass \%} \leq A_{IS} \leq 50 \text{ mass \%}$  and the content ( $A_{VO}$ ) of a volatile component in the resin is  $A_{VO} \leq 200 \text{ ppm}$ .

2. A toner for electrophotography comprising the binder resin (A) for a toner as described in claim 1.

3. A method for producing the binder resin (A) for a toner as described in claim 1 comprising the following processes (I), (II) and (III) in this order:

Process (I): A process comprising melt-mixing a carboxyl group-containing vinyl resin (B) and an epoxy group-containing vinyl resin (C) at a temperature ( $T_R$ ) satisfying  $120^\circ\text{C} \leq T_R \leq 230^\circ\text{C}$  in a twin screw extruder for the reaction;

Process (II): A process comprising introducing water into the twin screw extruder, and mixing water with the resin composition obtained in the Process (I) under the conditions satisfying a pressure ( $P_{EX}$ ) of  $1 \text{ MPa} \leq P_{EX} \leq 2.7 \text{ MPa}$  and a temperature ( $T_M$ ) of  $120^\circ\text{C} \leq T_M \leq 230^\circ\text{C}$ ; and

Process (III): A process comprising reducing the pressure inside the twin screw extruder for removing water and the volatile component.

4. The method for producing the binder resin (A) for a toner according to claim 3, wherein the carboxyl group-containing vinyl resin (B) has a glass transition temperature

( $T_{gB}$ ) of  $40^{\circ}\text{C} \leq T_{gB} \leq 70^{\circ}\text{C}$ , and the epoxy group-containing vinyl resin (C) has a weight-average molecular weight ( $C_{MW}$ ) of  $10,000 < C_{MW} \leq 100,000$  and has the epoxy equivalent ( $C_{EP}$ ) of  $1,000 \text{ g/Eq} \leq C_{EP} \leq 20,000 \text{ g/Eq}$ .